

REMARKS

Claims 1-32 are pending, in which no claims are currently amended, canceled, withdrawn, or newly presented.

The Office Action mailed January 27, 2005 rejected claims 1, 5-7, 9, 13-15, 17-20, 22-23, and 31-32 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* (U.S. 5,623,600) in view of *Xu* (U.S. Patent Application Publication No. 2002/0032766) and claims 2-4, 8, 10-12, 16, and 24-30 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* in view of *Xu* and further in view of *Wells* (U.S. 6,338,141).

Claim 21 was not rejected and is thus presumptively allowed pursuant to 37 CFR §1.104 (b) and (c)(1).

Applicants respectfully traverse the rejections under 35 U.S.C. § 103, in that none of *Ji et al.*, *Xu*, nor *Wells*, singly or in combination, discloses the claimed features.

For example, independent claims 1, 8, 9, and 16 each include the feature “**distributing a common copy of the flow** to each of the scanning computer systems in parallel.” Independent claims 17, 18, and 19 each recite “**duplicating the flow** to produce a plurality of **common copies** of the flow.” Independent claims 20 and 21 each recite “receiving **respective common copies of a flow of content** from the front-end processor in parallel.” Independent claims 22, 25, and 28 each include the feature “receiving an alarm ... when **a common flow** of content **scanned by the scanning computer systems in parallel** contains malicious code, said common flow including at least one of a hypertext markup file and a transferred file.”

Claim 1 clearly recites, “a **plurality of scanning computer systems** configured for scanning content for malicious code and generating an alarm when the content contains malicious code; and a front-end processor, coupled to the scanning computer systems, configured for **receiving a flow of content** from an external network and **distributing a**

common copy of the flow to each of the scanning computer systems in parallel for scanning.” Regarding claims 1 and 9, the Office Action (p. 3) correctly acknowledges, “Ji fails to teach ‘a plurality of scanning computer systems’ and distributing ‘a common copy of the flow to each of the scanning computer systems in parallel for scanning’.” The previous Office Action also correctly acknowledged this deficiency, and applied *Shanklin et al.* (U.S. 6,578,147) for a supposed teaching of “parallel sensors” (Office Action dated May 19, 2004, page 3, line 20 - page 4, line 13). The present Office Action, having dropped its application of *Shanklin et al.*, apparently in response to persuasive arguments by Applicants, now asserts instead, “the examiner asserts that the use of multiple virus scanning devices scanning a common copy of the flow in parallel is **well known in the art.**” (Office Action, p. 3, lines 3-4) The Examiner has apparently tried, but failed to produce evidence to support the assertion regarding this feature, and now relies solely on the “well known in the art” assertion to reject the claims.

The APA requires the Patent Office to articulate and place on the record the “common knowledge” used to negate patentability. *In re Zurko*, No. 96-1285 (Fed. Cir., Aug. 2, 2001). *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002). Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (holding that general conclusions concerning what is “basic knowledge” or “common sense” to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection). The Office Action has failed to produce specific factual findings and some concrete evidence to support these findings, and thus has failed in its rejection of the claims. Applicants respectfully request that such evidence be produced in a next Office Action, or that the rejection be withdrawn.

The Office Action then leaps to the conclusion, “It would have been obvious to one of ordinary skill in the art to modify Ji’s scanning system to incorporate a plurality of virus scanning systems for scanning a common copy of the flow in parallel because different scanners with different capabilities are used as a ‘safety net’ to improve the chances of detecting a virus, Xu, page 18, paragraphs 228 (Xu).”

Xu states, at page 18, ¶ 228:

In FIG. 23, the ISP network 2390 includes a packeting engine 2300 between clients 2321-2323 and the network service providers 2381-2383 coupled to the Internet 2385. The packeting engine 2300 directs the client packets through **a series of appliances**, including an intrusion detection system 2351 **one or more virus scanning devices 2352-2353**, and one or more of firewalls 2361-2363. Since companies that create virus scanning software differ in their capabilities to detect viruses and to issue timely virus signature updates, multiple virus scanning devices may be used as a “safety net” to improve the chances of detecting a virus. In previous examples of the invention, embodiments of a packeting engine used a service IP address to direct packets and disregarded the client's address. To perform its role in the ISP solution, an embodiment of a packeting engine 2300 can be configured to do just the opposite, i.e., use the client's IP address as the service IP address. Therefore, the **sequence of appliances is determined from the service IP address**, which is actually the client address that was assigned by the ISP 2390.

Xu specifically requires that processing of packets be performed by predefined, specific **sequences** of appliances such as the virus scanning devices 2352 and 2353. The cited portion of *Xu* refers to the ordering of a processing sequence as being determined by a service IP address, and thus *Xu* has nothing to do with the Office Action’s assertion of “scanning a common copy of the flow **in parallel**,” but instead teaches away from such parallel operations. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983). A prior art reference must be considered in its entirety including portions that would lead away from the claimed invention. *W.L. Gore &*

Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Further, obviousness rejections require some evidence in the prior art of a teaching, motivation, or suggestion to combine and modify the prior art references. *See, e.g., McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The Office Action has failed to provide any such evidence.

Moreover, Applicants respectfully submit that “a need for a malicious code detection system and methodology with the good anti-viral coverage of multiple anti-virus scanners but characterized by the low latency commensurate with that of a single anti-virus scanner” was recognized by the Applicants (specification, ¶ 9), and was solved by the present claimed invention (*See, e.g.,* specification, ¶ 10). It is well settled that the problem addressed and solved by a claimed invention must be given consideration in resolving the ultimate legal conclusion of obviousness under 35 U.S.C. § 103. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ 1333 (Fed. Cir. 1993); *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990); *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ 1321 (Fed. Cir. 1990); *Jones v. Hardy*, 727 F.2d 1524, 220 USPQ 1021 (Fed. Cir. 1984). The Office Action has failed in this regard as well, instead applying impermissible hindsight to assert that features which are not disclosed or suggested by any applied references are “well known in the art.”

Further, Applicants respectfully submit that the reasoning that the Examiner puts forth for the rejection with respect to the Examiner’s assertion regarding “the use of multiple virus scanning devices scanning a common copy of the flow in parallel” contravenes 35 U.S.C. § 132, which requires the Director to “notify the applicant thereof, stating the reasons for such

rejection.” This section is violated if the rejection “is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.” *Chester v. Miller*, 906 F.2d 1574, 15 USPQ2d 1333 (Fed. Cir. 1990). This policy is captured in the Manual of Patent Examining Procedure. For example, MPEP § 706 states that “[t]he goal of examination is to clearly articulate any rejection early in the prosecution process so that applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity.” Furthermore, MPEP § 706.02(j) indicates that: “[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.”

Furthermore, 35 U.S.C. § 103 requires each limitation to be found in the references and a teaching for the combination or modification of the references to flow from the references themselves and not from generalities. The Office Action has failed at least in these regards, and thus, the rejection of the claims should be withdrawn.

With regard to claims 5, 13, and 31-32, the Office Action (p. 3) further correctly acknowledges, “Ji fails to teach scanning computer systems configured to execute respective anti-virus scanning software having different, corresponding coverage of malicious code,” then again makes a logical leap to assert, “However, the examiner asserts that the use of multiple virus scanning devices with different detection software and with different coverage of malicious code is **well known in the art**,” concluding, “It would have been obvious to one of ordinary skill in the art to modify the Ji’s scanner to incorporate virus scanning software differ in their capabilities as a ‘safety net’ to improve the chances of detecting a virus, Xu, page 18, paragraphs 228.” Applicants respectfully request that evidence supporting the “well known in the art” assertion be produced in a next Office Action, or that the rejection be withdrawn. Similarly to the reasons

previously proffered regarding claims 1 and 9, the rejection of claims 5-7, 13-15, 17-20, 22-23, and 31-32 should be withdrawn.

With regard to dependent claims 2-4 and 10-12, the addition of *Wells*, which is applied as supposedly teaching detecting computer viruses using a collection of relational data to detect computer viruses, fails to cure the deficiencies of *Ji et al.* and *Xu* as discussed previously, neither singly nor in any reasonable combination, and thus the rejection of dependent claims 2-4 and 10-12 should also be withdrawn.

Regarding claims 8 and 16, the Office Action (pp. 6-7) further correctly acknowledges, “*Ji* fails to teach a plurality of scanning computer systems configured to execute respective anti-virus scanning software having different, corresponding coverage of malicious code for scanning content for malicious code,” again making a leap to contend, “However, the examiner asserts that the use of multiple virus scanning devices in parallel with different detection software and with different coverage of malicious code is **well known in the art**,” then concluding, “It would have been obvious to one of ordinary skill in the art to modify *Ji*’s scanning system to incorporate a plurality of virus scanning systems differ [*sic*] in their capabilities be used [*sic*] as a ‘safety net’ to improve the chances of detecting a virus, *Xu*, page 18, paragraphs 228 (*Xu*).” For reasons similar to those discussed previously regarding the rejection of claims 1 and 9, and since the addition of *Wells* fails to cure the deficiencies of *Ji et al.* and *Xu* as discussed previously, the rejection of claims 8 and 16 should be withdrawn. If the rejection is maintained in a next Office Action, Applicants respectfully request that evidence in support of the “well known in the art” assertion be produced in a next Office Action, and that the next Office Action be made non-final, to give Applicants a fair opportunity to respond.

As pointed out in the response filed August 19, 2004 regarding the Office Action dated May 19, 2004, Applicants further respectfully submit that many claims are again rejected

improperly throughout the outstanding Office Action. As clearly stated by the MPEP § 2141.02, “Ascertaining the differences between the prior art and the claims at issue requires interpreting the claim language, and considering both the invention and the prior art references as a whole.” Further, “In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983)”

For example, regarding the rejection of at least claims 22-23, the Office Action improperly gives no reasons why the applied references suggest at least claim 22-23, e.g., at Page 5, lines 1-3, asserting, “Claims 22-23 recites [*sic*] a detection management system with features recited in claims 1, 6 and 7. Claims 22-23 are rejected for the same reasons stated in the statement of rejections of claims 1, 6 and 7 above.” The Office Action apparently relies again on various combinations of words recited in the claims to assemble a rejection based on the occurrences of those words in other claims, for example, “Claim 24 is an apparatus reciting limitations of claims 1, 2 and 4” at Page 8, lines 5-6. Applicants respectfully submit that claim 24 depends from claim 22, which the Office Action contends is somehow rejected for the same reasons as “claims 1, 6, and 7,” but dependent claim 24 supposedly recites “limitations of claims 1, 2 and 4,” which is, at best, vague, inconsistent and confusing.

Further, the Office Action asserts, “Claims 25-27 recite limitations (broader in scope) of apparatus claims 1, 2, 4, 6 and 7,” then states, “Claims 25-27 are rejected for the same reasons provided in the statement of rejections of claims 1, 2, 4, 6 and 7 above” at Page 8, lines 7-9. Applicants respectfully submit that the “statement of rejections of claims 1, 2, 4, 6 and 7” is found on pp. 2-3 (claim 1), pp. 5-6 (claims 2, 4), p. 3 (claim 6), and pp. 3-4 (claim 7).

Additionally, the Office Action states, “In regards to claims 28-30, the claims limitations recite a storage medium having computer programs to execute the steps of 1-4, 6 and 7, therefore the same rejection applies” at Page 8, lines 10-12.

There is no explanation proffered as to how or why any of the applied references, either singly or in combination, apply to these claims specifically, other than a combination of recitations of “same reasons” for various combinations of claims that were rejected on different grounds.

Similarly, the rejections at least of claim 17 (rejected by stating, “an apparatus (front end system) reciting limitations of claims 1 and 6” (Office Action, Page 4)), claim 18 (rejected by stating, “a method claim reciting limitations of claims 1 and 6. Claim 17 is rejected for the same reasons stated in the rejection of claims 1 and 6 above.” (Office Action, Page 4)), claim 19 (rejected by stating, “a storage medium having instructions to execute the method of claim 18, therefore the same rejection applies” (Office Action, Page 4)), and claim 20 (rejected by stating, “an apparatus claim reciting limitations of claims 1 and 6” (Office Action, Page 4)) are improper.

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998). Moreover, Applicants respectfully submit that the reasoning that the Examiner puts forth for the rejection with respect to at least claims 17-18, 20, and 22-30 contravenes 35 U.S.C. § 132, which requires the Director to “notify the applicant thereof, stating the reasons for such rejection.” This section is violated if the rejection “is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.” *Chester v. Miller*, 15 USPQ2d 1333 (Fed. Cir. 1990). This policy is captured in the Manual of Patent Examining Procedure. For example, MPEP § 706 states that “[t]he goal of examination is

to **clearly articulate** any rejection early in the prosecution process so that applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity." Furthermore, MPEP § 706.02(j) indicates that: "[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to respond." Therefore, if a next action maintains these rejections, Applicants respectfully request that the next action be made non-final to give the Applicants a fair opportunity to respond.

Thus, for reasons stated above, Applicants respectfully request that the rejection of all pending claims be withdrawn.

Therefore, the present application overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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